

**AMENDMENTS TO THE DRAWINGS**

The attached sheets of drawings includes changes to Figs. 4A -4E. These sheets, which includes Figs. 4A-4E, replaces the original sheet including Figs. 4A-4E. The marked-up copies show the changes made to Figs. 4A-4E. Specifically 4A is completely replaced and additional labels are added to Figs. 4B-4E.

Attachment: Replacement sheets and marked-up copies

**REMARKS**

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated January 5, 2007 has been received and its contents carefully reviewed.

Claims 1 and 15 are hereby amended, and claims 8-14 are withdrawn. Accordingly, claims 1-6 and 15-20 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

In the Office Action, the drawings are objected to under 37 CFR 1.83(a). Claims 1 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 1-6 and 15-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,259,119 to Ahn et al. (hereinafter "Ahn") in view of U.S. Patent No. 6,252,247 to Sakata (hereinafter "Sakata").

The attached replacement drawings overcome the objection to the drawings.

The rejection under 35 U.S.C. 112, first paragraph, is now moot in light of the amendments to claims 1 and 15.

The rejection of claims 1-6 and 15-20 is respectfully traversed and reconsideration is requested. Claims 1-6 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "an heat generated alloy layer formed on the surface of the first metal layer by heat generated by continuously depositing a second metal on the first metal layer, wherein a residual of the second metal is entirely removed so that the heat generated alloy layer is directly connected to the transparent electrode." Claims 15-20 are allowable over the cited references in that each of these claims recites a combination of elements including, for example, "herein the gate electrode and the gate pad both include a first layer formed of a first metal and a heat generated alloy layer formed on the surface of the first layer by heat generated by continuously depositing a second metal on the first metal, a residual of the second metal is entirely removed so that the heat generated alloy layer is directly connected to the transparent electrode." Ahn and Sakata, singly or in combination, do not teach or suggest at least this feature of the claimed invention.

As described in amended claims 1 and 15, the present invention discloses that a conductive line is composed of a first metal layer and a heat generated alloy layer formed on the surface of the first metal layer by heat generated by continuously depositing a second metal on the first metal layer. So the present invention has two layers including the first metal layer and the heat generated alloy layer, because the second metal layer residing on the heat generated alloy layer is entirely removed by an etching process as shown, for example, in Fig. 4e.

On the contrary, Ahn discloses that the inter-metallic layer 199 is partially formed between the low resistance gate pad 117a and a second metal gate pad 117 as shown in Fig. 7a. That is to say, Ahn has three layers including a low resistance gate pad 117a, an inter-metallic layer 199, and a second metal gate pad 117, because the second metal gate pad 117 is not entirely removed from the low resistance gate pad 117a. Accordingly, Ahn is different from the present invention. Further, Sakata does not teach or suggest the above-mentioned the feature of the claimed invention, so that it cannot cure the deficiencies of Ahn. Accordingly, claims 1-6 and 15-20 are allowable over Ahn and Sakata.

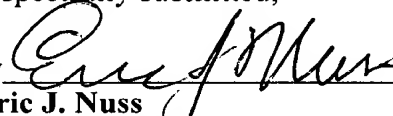
Applicants believe the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: **5 April 2007**

Respectfully submitted,

By   
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Attachments



Marked-Up Drawings in Response to Non-Final  
Office Action dated: 5 January 2007  
Art Unit: 2629  
Inventors: LEE, et al  
USSN 09/923,810  
Sheet 2 of 2

FIG. 4D

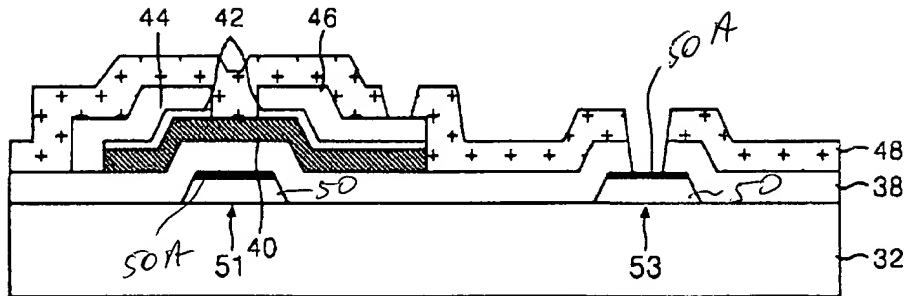
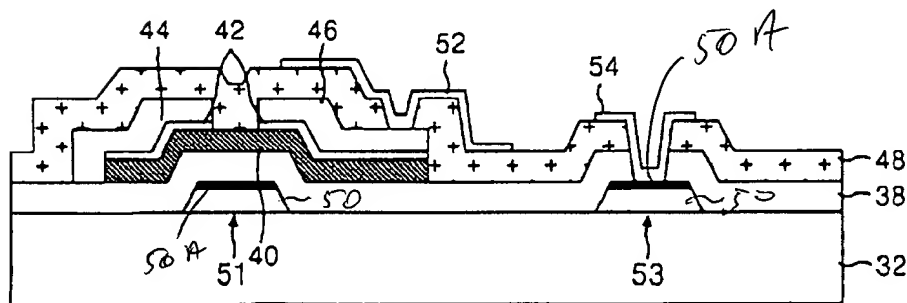


FIG. 4E





Marked-Up Drawings in Response to Non-Final  
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Art Unit: 2629  
Inventors: LEE, et al  
USSN 09/923,810  
Sheet 1 of 2

FIG. 4A

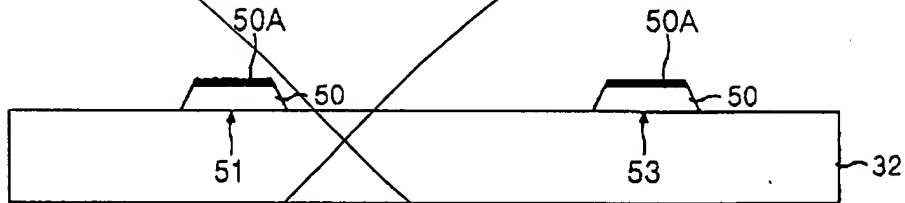


FIG. 4B

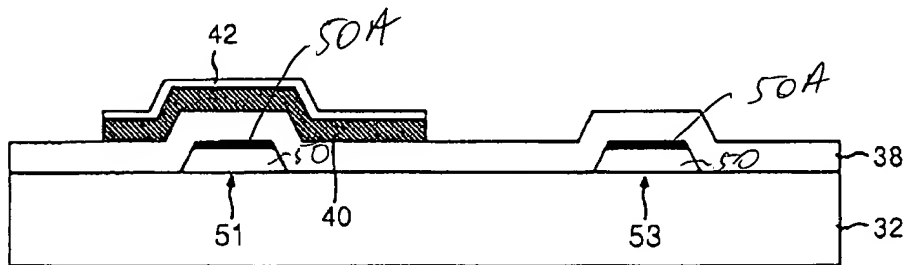
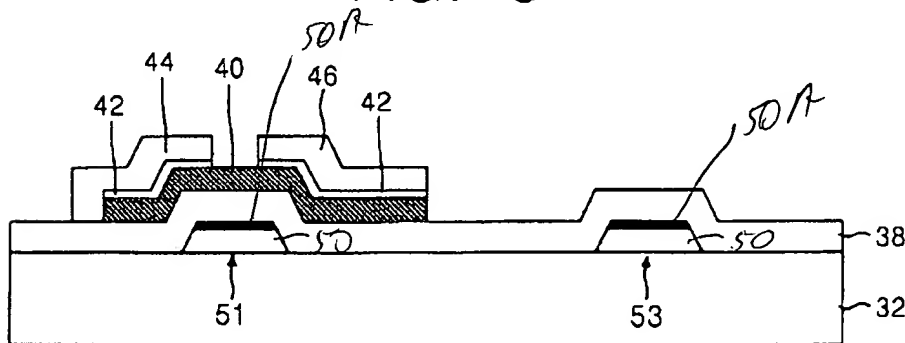


FIG. 4C



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